

It's not that  
easy being  
green....





# EASIER THAN YOU THINK

## The Green Suppliers Network



**Green Suppliers Network**



## Opportunities Identified – 60 Reviews

Cost Savings from Environmental Impact Opportunities	\$10,945,033/yr
Energy Conservation (MM Btu)	346,708
Water Conservation (gallons)	35,320,965
Water Pollution Reduction (lbs)	19,477,288
Air Emissions Reduction (lbs)	156,346
Solid Waste Reduction (lbs)	3,471,901
Cost Savings from Lean Opportunities	\$23,682,524/yr
Cost Savings from Other Opportunities	\$499,193/yr
<b>Total Potential Cost Savings</b>	<b>\$35,126,750/yr</b>
One-Time Lean Impact Opportunities	\$19,829,477



# Lean & Clean Manufacturing

## “Lean” eliminates...

- **D**efects
- **O**verproduction
- **W**aiting
- **N**on-utilized resources
- **T**ransportation
- **I**nventory
- **M**otion
- **E**xtra processing

## “Clean” adds...

- **F**ull use of Raw Material
- **E**nergy Efficiency
- **W**ater conservation
- **E**limination of Toxics
- **R**eduction of:
  - Packaging Wastes
  - Emissions to Air & Water
  - Solid & Hazardous Wastes
  - Regulatory obligations and risks



# Green Suppliers Network Assessment

## Step 1: Understand Current State

- Identify project focus & select team
- Determine benchmarks & change potential
- “Walk the floor”

## Step 2: Analyze System Conditions

- Identify waste sources
- Gather data to support options

## Step 3: Consider Improvement Options

- Create future state maps
- Prioritize continuous improvement list







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## CASE STUDIES



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# Chemico Systems Inc.

## Pontiac, Michigan

Manufacturer of specialty chemical products for commercial/industrial applications

- Toxic/hazardous process feedstock reduced by 10,000 lbs/yr
- Solid Waste reduced by 15,000 lbs/yr
- Energy savings by 19,000 CCF natural gas/yr
- Water use reduced by 744,000 gal/yr
- Total dollar savings for one process: \$23,400



# Har-Conn Chrome Company

## W. Hartford, Connecticut

Metal finishing company supplying hi-tech applications of electroplating and related coatings to the aerospace industry

- Improved management of boiler fuel with a savings of \$36,000/yr.
- Recovered compressor waste heat with a savings of \$3,000/yr.
- Follow-on energy assessment led to 16% reduction in energy bills.
- Installed rinse water flow controls with a savings of \$13,000/yr.
- Additional improvements can save the company \$425,000 annually.





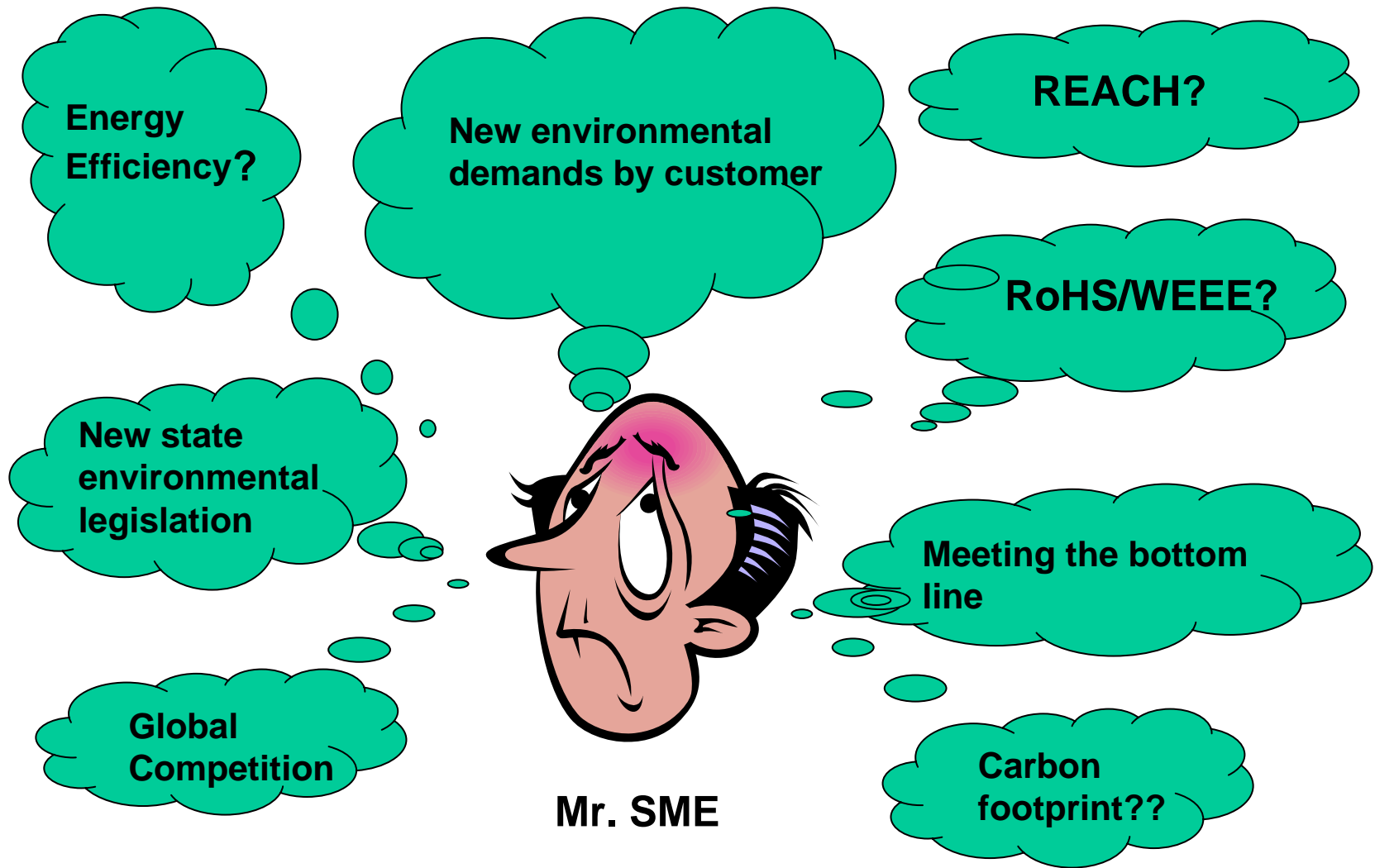
# The Bottom Line

- *Once OEMs recognize that you put in additional effort to reduce their environmental footprint, it gives you a leg up on the competition—and you can't place a dollar value on that! "*

—John Whalen, Facility General Manager, **Sermatech**



# Mr. SME's Needs are Evolving











# Green Suppliers Network

## Evolving to meet those needs

- Pollution Prevention Best Practices
- Chemical evaluative tools for risk assessment and informed decision making
- Green Buildings
- Coordinated Energy Issues
- Environmentally Preferable Purchasing
- Climate Change Strategies





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<b>About Green Suppliers Network</b> <b>Membership</b> <b>Program Results</b> <b>Tools &amp; Resources</b> <b>Beyond Lean and Clean</b> <b>Frequent Questions</b>	<b>Welcome to the Green Suppliers Network</b> <p>As a manufacturer, you work hard to keep costs down, profits up, and your customers happy. But can you stay competitive and reduce your environmental footprint at the same time? The answer is yes.</p> <p>By partnering with the Green Suppliers Network, you will learn lean manufacturing techniques coupled with sound environmental strategies, which we call the <i>Lean and Clean Advantage</i>.</p> <p><a href="#">Learn More</a>   <a href="#">Join Now</a>   <a href="#">Success Stories</a>   <a href="#">Results</a></p>	
		
<p>"We must stop thinking of lean and clean as separate initiatives. This is not about inserting clean where it fits with lean approaches. They are symbiotic, each leveraging off the other in achieving beneficial, profitable impacts for a company. Integrating the two as one process is the only solution to a lean and clean future."</p> <p>— Rick Fleming, The Right Place, Inc.</p>	<b>Green Suppliers Network Highlights</b> <p>Attending or exhibiting at a conference or trade show? Consider using the Green Suppliers Network booth.</p> <p>Thank you for visiting the Green Suppliers Network booth at the National Environmental Partnership Summit in New Orleans, LA, on May 7–11, 2007. For more information about the Lean and Clean trainings, please see Green Suppliers Network Training Sessions—Bringing Added Value to You.</p> <p>The Green Suppliers Network would like to congratulate Dick Krause, of High Technology/Rochester MEP, for being named Innovator of the Year at the 2007 MEP National Conference Awards.</p> <p><a href="#">Privacy Statement</a>   <a href="#">Security Notice</a>   <a href="#">Accessibility Statement</a>   <a href="#">Disclaimer</a>   <a href="#">FOIA</a></p>	
 	<p>Green Suppliers Network is a joint effort of the U.S. Environmental Protection Agency, and the U.S. Department of Commerce, National Institute of Standards and Technology, Manufacturing Extension Partnership Program.</p>	



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